

ABSTRACT

A radio communication apparatus capable of alleviating a burden in setting a transmission format and suppressing increases in the scale of the apparatus.

5 In this apparatus, space multiplexing adaptability detection section (108) detects space multiplexing transmission adaptability for divided bands (DB-1 to DB-Nd) obtained by dividing a communication band to which Ns subcarrier signals belong in multicarrier transmission

10 and to which a plurality of subcarrier signals belong, and outputs the detection results (#1 to #Nd). Transmission format setting section (110) sets a transmission format when carrying out radio transmission based on the detection results (#1 to #Nd) from space

15 multiplexing adaptability detection section (108).